REMARKS

Before entry of this Amendment and Response, the status of the application according to the pending Office action is as follows:

- Claims 1-3, 8-12, 17-18, and 20-22 are rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 5,992,052 to Moretti ("Moretti").
- Claims 4 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of United States Patent No. 6,041,518 to Polycarpe ("Polycarpe").
- Claims 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of United States Patent No. 5,699,627 to Castro ("Castro").
- Claims 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of United States Patent No. 5,675,914 to Cintron ("Cintron").
- Claims 15, 16, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of United States Patent No. 5,319,866 to Foley et al. ("Foley").
- Claims 23-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of United States Patent No. 6,401,364 to Burt ("Burt").

Applicants appreciate the Examiner's courtesy in granting Applicants' representatives the personal interview held on March 30, 2004. The amendments and remarks set forth herein are consistent with those discussed during the interview. In view of the interview, Applicants hereby amend independent claims 1 and 22 to add the language "constant, substantially open" to describe the fluidic communication through the sole. Further, the language "wherein a substantial portion of the plurality of first openings are interconnected" has been moved to

dependent claims 28 and 29, which are hereby presented for consideration. No new matter has been added thereby.

Support for these amendments can be found at least in paragraphs **[0029]** ("hot and humid air coming down through the openings 2, 3 can pass through the openings 11, 12 in the support layer"); and **[0034]** ("large recesses or openings 33, 34, 35 are disposed in the outsole layer 30 to facilitate the dispersion of the hot and humid air from the interior of the shoe 101 via openings 11, 12 in the support layer 10 to the outside air"). As is clear from the specification and drawings, the openings are always open, thus providing constant fluidic communication. In order to accommodate embodiments of the invention that include a membrane in the sole, the claimed "constant" fluidic communication is being characterized as "substantially open." By way of example, paragraph **[0035]** states that other components, such as a breathable membrane, may be utilized in the sole to prevent intrusion of foreign objects into the shoe. "If the shoe 101 is not used exclusively for indoor sports, then a breathable membrane 26 can be provided for complete watertightness. [. . .] [M]embrane 26 prevents stones or dirt from entering the interior of the shoe 101."

Claims 1-29 are currently pending and claims 1-27 are presented for reconsideration. In view of the above amendments and following remarks, Applicants respectfully request reconsideration and withdrawal of all grounds of rejection and passage of all pending claims to allowance.

1. Claims 1-3, 8-12, 17-18, and 20-22 are rejected under 35 U.S.C. § 102(e) as being anticipated by Moretti. Applicants respectfully traverse this rejection as applied to the claims, as amended.

Briefly, Moretti purports to describe a vapor permeable shoe. Specifically, the shoe 10 comprises a vapor-permeable upper 11 that is associated with a sole 12. Moretti, col. 2, ll. 64-65. The sole 12 has a tread 13 made of an elastomer that is shaped so as to form a plurality of domes 14 having a convexity directed toward the ground. Moretti, col. 2, l. 67 – col. 3, l. 3. In Moretti, FIGS. 2 and 3 show no opening in the shoe sole 12. Instead, the domes 104 are integrally formed in the sole 103. Moretti, col. 3, ll. 40-41 ("tread 103 is made of an elastomer and shaped so as to form a plurality of domes 104."). Each one of the domes 104 has a minute through slit 105 which is normally closed by virtue of the elasticity of the material, i.e., a one-way valve that opens in an over-pressure condition. See Moretti, col. 3, ll. 4-10.

In contrast, Applicants claim, in amended claims 1 and 22, "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough that at least partly overlaps the plurality of second openings, such that there exists constant, substantially open fluidic communication between at least one of the first openings and the at least one third opening." Applicants respectfully assert that Moretti does not anticipate Applicants' amended claims 1 and 22 because Moretti lacks, at least, "an outsole layer having a ground engaging surface ***defining at least one third opening*** extending therethrough that at least partly overlaps the plurality of second openings, such that there exists ***constant, substantially open*** fluidic communication."

As described above, the area of domes 104 shown in FIG. 1 of Moretti is not an opening. At most, the area comprising the plurality of domes 104 might be construed as a recess, not an opening. Moreover, the slits 105 through each dome 104 (the only "openings" in the sole 12 of

the shoe 10), are normally closed, thus there does not exist "***constant, substantially open*** fluidic communication between at least one of the first openings and the at least one third opening."

Applicants, therefore, respectfully submit that amended independent claims 1 and 22 are patentable over Moretti. Because claims 2-3, 8-12, 17-18, and 20-21 depend, either directly or indirectly, from amended independent claim 1 and include all the limitations thereof, Applicants respectfully submit that these claims are also patentable. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-3, 8-12, 17-18, and 20-22 under 35 U.S.C. § 102(e) as being anticipated by Moretti.

2. Claims 4 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of Polycarpe. Applicants respectfully traverse this rejection as applied to the claims, as amended.

Polycarpe appears to describe a boot with a three-layered shoe sole, composed of a flexible pad 15, a rigid pad 20, and a bottom pad 19. Polycarpe, col. 3, ll. 31-33; FIG. 4. A plurality of aligned air cavities 9 and holes 16 penetrate both the flexible pad 15, and the rigid pad 20. Polycarpe, col. 3, ll. 44-46; FIG. 4. Formed generally longitudinally on an upper surface of the bottom pad 19 are a plurality of grooves 22, which are joined to a larger opening 21 containing a fan 7 and a heating element 8. Polycarpe, col. 3, ll. 20-26 and 36-40. In operation, the fan 7 purportedly draws air into the boot via one or more air entrances 3, forces the air across the heating element 8, and delivers it through the grooves 22 into the interior of the shoe through the cavities 9 and holes 16. Polycarpe, FIG. 1.

The invention described in Polycarpe is apparently directed to controlling the climate in the interior of a shoe, such that the interior humidity is decreased and the wearer's foot remains

dry. See Polycarpe, col. 2, ll. 2-3 ("air circulates around the entire shoe and thus *keeps the feet of a user dry*." (emphasis added)); col. 2, ll. 6-7 ("air circulates around the shoe thus *keeping the feet warm and dry*." (emphasis added)); col. 3, ll. 18-19 ("[a]s a result, the feet of the user *remain fresh and dry*." (emphasis added)); col. 3, ll. 25-26 ("thus the feet of the user *remain dry*." (emphasis added)). Moreover, Polycarpe provides plugs 4 disposed near each air entrance 3, "to prevent water from entering the shoe." Polycarpe, col. 3, ll. 1, 28-30.

In contrast to the references described above, Applicants claim, in amended claim 1, a sole having an insole layer defining a plurality of first openings, a support layer defining a plurality of second openings, and "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough that at least partly overlaps the plurality of second openings, such that there exists constant, substantially open fluidic communication between at least one of the first openings and the at least one third opening."

Applicants respectfully assert that if Moretti and Polycarpe were combined, Polycarpe would be rendered ineffective for its intended purpose. Polycarpe is designed to keep the feet warm and dry. See e.g., Polycarpe, col. 2, ll. 3, 7; col. 3, ll. 19, 26. Plug-like covers 4 are present on air entrances 3 to prevent water from entering the shoe. Polycarpe, col. 3, ll. 28-30. It seems that if Polycarpe describes plugs for air entrances on the shoe upper, then "a ground engaging surface defining ***at least one third opening extending therethrough***" would be completely undesirable. In view of the above, since the combination of Moretti and Polycarpe would render Polycarpe unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See In re Gordon, 221 USPQ 1125 (Fed. Cir.

1984); MPEP 2143.01. As such, the combination is improper to establish a prima facie case of obviousness.

Even if Moretti and Polycarpe were combinable, which they are not, the combination of Moretti with Polycarpe fails to render obvious Applicants' amended claim 1 (from which claims 4 and 5 depend), because Moretti fails to teach "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough." This shortcoming is not cured by Polycarpe, which does not teach any opening extending through the outsole layer. As such, constant, substantially open fluidic communication, as claimed in Applicants' claim 1 (through the outer sole), is neither disclosed or suggested in the references.

Applicants, therefore, respectfully submit that dependent claims 4 and 5 are patentable over Moretti, in view of Polycarpe, as that combination fails to render obvious Applicants' amended independent claim 1, from which claims 4 and 5 depend. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 4 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of Polycarpe.

3. Claims 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view Castro. Applicants respectfully traverse this rejection as applied to the claims, as amended.

Castro appears to describe an integral system for the manufacture of cushioned shoes. A shoe sole 40 includes an intersole element 43 with multiple holes 44. Castro, col. 5, ll. 31-33. A plurality of truncated-shaped elements 47 on a plantar piece 45 upwardly project to couple by pressure with the holes 44. Castro, col. 5, ll. 34-36. Finally, the plantar piece 45 has an antiskid lower surface 46, that does not appear to include openings through a ground engaging surface

thereof. Castro, col. 5, ll. 33-34. A sole element 41 contains a hollow opening 42, into which is inserted the plantar piece 45. Castro, FIG. 11.

In contrast to the references described above, Applicants claim, in amended claim 1, a sole having an insole layer defining a plurality of first openings, a support layer defining a plurality of second openings, and "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough that at least partly overlaps the plurality of second openings, such that there exists constant, substantially open fluidic communication between at least one of the first openings and the at least one third opening."

If combined, the combination of Moretti with Castro fails to render obvious Applicants' claim 1 (from which claims 6 and 7 depend), because Moretti fails to teach "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough . . . ***such that there exists constant, substantially open fluidic communication***." This shortcoming is not cured by Castro, which teaches an opening extending through the outsole layer that is plugged by the plantar piece. The hollow opening 42 could not be considered a "third opening extending [through the ground engaging surface] . . . such that there exists constant, substantially open fluidic communication," because that opening is plugged by the plantar piece 45. Thus, there is no disclosure or suggestion in the references of "***constant, substantially open fluidic communication.***"

Applicants, therefore, respectfully submit that dependent claims 6 and 7 are patentable over Moretti, in view of Castro, as that combination fails to render obvious Applicants' amended independent claim 1, from which claims 6 and 7 depend. Accordingly, Applicants respectfully

request reconsideration and withdrawal of the rejection of claims 6 and 7 under 35 U.S.C. § 103(a) as being unpatentable over Moretti in view of Castro.

4. Claims 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of Cintron. Applicants respectfully traverse this rejection as applied to the claims, as amended.

Cintron appears to teach a removable footbed for a shoe to circulate air and provide shock absorption. The footbed 10 is comprised of three main layers: a first layer 20, a second layer 30, and a third layer 40. Cintron, col. 2, ll. 61-62; col. 3, ll. 17-18, 34-35; FIG. 2. A plurality of ventilation holes 23, 24 are disposed in the layers, the third layer 40 including a series of interconnected channels (the channel system 58) and a concave bump. Cintron, col. 4, ll. 16-28; FIG. 4. The concave bump 46 purportedly acts as a type of bellows, forcing air from the bump 46, through the channel system 58, and then through the ventilation holes 23, thus ventilating the wearer's foot. Cintron, col. 7, ll. 18-28. Cintron does not describe any openings in the outer sole of the shoe; in fact, "[i]t is . . . an object of the present invention to provide an air-circulating footbed *which does not destroy the integrity of the exterior of the shoe*." Cintron, col. 1, ll. 26-29 (emphasis added).

In contrast to the references described above, Applicants claim, in amended claim 1, a sole having an insole layer defining a plurality of first openings, a support layer defining a plurality of second openings, and "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough that at least partly overlaps the plurality of second openings, such that there exists constant, substantially open fluidic communication between at least one of the first openings and the at least one third opening."

Applicants respectfully submit that the combination of Moretti and Cintron is improper, because Cintron teaches away from such a combination. Cintron clearly states that "[i]t is also an object of the present invention to provide an air-circulating footbed which does not destroy the integrity of the exterior of the shoe." Cintron, col. 1, ll. 25-29. Clearly, a "third opening," as claimed in Applicants' amended claim 1 (from which claims 13 and 14 depend), penetrates the shoe's exterior. As such, Cintron teaches away from providing an opening in the outsole, thereby "destroy[ing] the integrity of the exterior of the sole," thus making the combination of Cintron and Moretti improper. See In re Grasselli, 218 USPQ 769 (Fed. Cir. 1983); MPEP 2145. As such, the combination is improper to establish a prima facie case of obviousness.

Even if the references were combinable, which they are not, the combination of Moretti with Cintron fails to render obvious Applicants' claim 1 (from which claims 13 and 14 depend), because Moretti fails to teach "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough." This shortcoming is not cured by Cintron, which does not teach any opening extending through the outsole layer. In fact, Cintron teaches away from the claimed invention by addressing the undesirability of providing any opening in the outsole of the shoe.

Applicants, therefore, respectfully submit that dependent claims 13 and 14 are patentable over Moretti, in view of Cintron, as that combination fails to render obvious Applicants' amended independent claim 1, from which claims 13 and 14 depend. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 13 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of Cintron.

5. Claims 15, 16, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of Foley. Applicants respectfully traverse this rejection as applied to the claims, as amended.

Foley appears to describe an athletic shoe having a midsole substantially devoid of cushioning material. The shoe sole of Foley shows a void or an opening 56, generally located in the midsole 18 of the shoe. Foley, col. 6, ll. 56-59; FIG. 5. A stiff arch member 24 is installed in the opening 56, to provide the foot support lost by removal of the midsole material. Foley, col. 5, ll. 50-54; FIGS. 2-4. A plurality of apertures 72 may be present in the stiff arch member 24, exposing a material 74, thus serving an aesthetic function. Foley, col. 7, ll. 37-43. A plurality of material layers are disposed above the arch member 24, but none of those layers appear to have any holes, perforations, apertures, or openings. Foley, col. 7, l. 65 – col. 8, l. 10.

In contrast to the references described above, Applicants claim, in amended claim 1, a sole having an insole layer defining a plurality of first openings, a support layer defining a plurality of second openings, and "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough that at least partly overlaps the plurality of second openings, such that there exists constant, substantially open fluidic communication between at least one of the first openings and the at least one third opening."

In combination, Moretti and Foley fail to render obvious Applicants' claim 1 (from which claims 15, 16, and 19 depend), because Moretti fails to teach "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough . . . such that there exists constant, substantially open fluidic communication." This shortcoming is not cured by Foley, which teaches replacing a portion of the midsole 18 below the arch with the stiff arch

member 24. Foley, col. 5, ll. 45-52; col. 6, ll. 56-58; FIG. 6. The stiff arch member 24 prevents any communication between the inside of the shoe and the outside of the shoe. Foley, col. 7, ll. 28-32. The apertures 72 appear only to enable viewing of material 74, but do not appear to allow for fluidic communication. Foley, col. 7, ll. 41-46.

Applicants, therefore, respectfully submit that dependent claims 15, 16, and 19 are patentable over Moretti, in view of Foley, as that combination fails to render obvious Applicants' amended independent claim 1, from which claims 15, 16, and 19 depend. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 15, 16, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of Foley.

6. Claims 23-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Moretti, in view of Burt. Applicants respectfully traverse this rejection as applied to the claims, as amended.

Burt appears to disclose a ventilated shoe wherein the upper is constructed of at least two layers, which are made from a ventilated mesh material. The upper of the shoe 10 is described as being constructed of three layers: an external layer 20, a reinforcing layer 30, and an internal layer 40. Burt, col. 4, ll. 35-39. The external 20 and internal 40 layers are constructed of a ventilated mesh material. Burt, col. 4, ll. 37-39. Burt discloses no particular construction of the *sole* of the shoe.

In contrast, Applicants claim, in amended claim 1, a sole having an insole layer defining a plurality of first openings, a support layer defining a plurality of second openings, and "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough that at least partly overlaps the plurality of second openings, such that there exists

constant, substantially open fluidic communication between at least one of the first openings and the at least one third opening."

The combination of Moretti and Burt fails to render obvious Applicants' claim 22 (from which claims 23-27 depend), because Moretti fails to teach "an outsole layer having a ground engaging surface defining at least one third opening extending therethrough." This shortcoming is not cured by Burt, which does not teach any opening extending through the outsole layer. Burt is drawn to ventilated shoe uppers.

Applicants, therefore, respectfully submit that dependent claims 23-27 are patentable over Moretti, in view of Burt, as that combination fails to render obvious Applicants' amended independent claim 22, from which claims 23-27 depend. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 23-27 under 35 U.S.C. § 103(a) as being unpatentable over Moretti in view of Burt.

7. New claims 28 and 29 have been added to claim, in dependent form, the interconnection of a substantial portion of the plurality of first openings. As discussed in the interview, this limitation is not required in independent claims 1 and 22 to distinguish over the prior art and has therefore been made dependent thereon.

CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and allowance of claims 1-29 in due course. The Examiner is invited to contact Applicants' undersigned representative by telephone at the number listed below to discuss any outstanding issues.

Respectfully submitted,

Date: Apr. 15, 2004
Reg. No. 51,842
Tel. No. (617) 310-8671
Fax No. (617) 790-0100

Andrew L. Jagenow
Attorney for Applicants
Testa, Hurwitz, & Thibeault, LLP
125 High Street
Boston, MA 02110

3047463_1